DECISION AND FINDING OF NO SIGNIFICANT IMPACT FOR CANADA GOOSE DAMAGE MANAGEMENT IN NEW JERSEY

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA APHIS), Wildlife Services (WS) program responds to requests for assistance from individuals, organizations and agencies experiencing damage caused by wildlife. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions may be categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). To evaluate and determine if any potentially significant impacts to the human environment from WS' planned and proposed program would occur, an environmental assessment (EA) was prepared. The EA documents the need for Canada goose damage management in New Jersey and assessed potential impacts of various alternatives for responding to damage problems. The EA analyzes the potential environmental and social effects for resolving Canada goose damage related to the protection of resources, and health and safety on private and public lands in New Jersey. WS' proposed action is to implement an Integrated Wildlife Damage Management (IWDM) program on public and private lands in New Jersey. Comments from the public involvement process were reviewed for substantive issues and alternatives which were considered in developing this decision.

WS is the Federal program authorized by law to reduce damage caused by wildlife (Act of 1931, as amended (46 Stat. 1486; 7 U.S.C. 426-426c) and the Rural Development, Agriculture, and Related Agencies Appropriations Act of 1988, Public Law 100-102, Dec. 27, 1987. Stat. 1329-1331 (7 U.S.C. 426c). Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992). WS uses an Integrated Wildlife Damage Management (IWDM) approach, commonly known as Integrated Pest Management (WS Directive 2.105) in which a combination of methods may be used or recommended to reduce damage. WS wildlife damage management is not based on punishing offending animals but as one means of reducing damage and is used as part of the WS Decision Model (Slate et al. 1992, USDA 1997, WS Directive 2.201). The imminent threat of damage or loss of resources is often deemed sufficient for wildlife damage management actions to be initiated (U.S. District Court of Utah 1993). Resource management agencies, organizations, associations, groups, and individuals have requested WS to conduct Canada goose damage management to protect resources and human health and safety in New Jersey. All WS wildlife damage management activities are in compliance with relevant laws, regulations, policies, orders and procedures, including the Endangered Species Act of 1973.

Consistency

The analyses in the EA demonstrate that Alternative 1: 1) best addresses the issues identified in the EA, 2) provides safeguards for public health and safety, 3) provides WS the best opportunity to reduce damage while providing low impacts on non-target species, 4) balances the economic effects to agricultural and natural resources, and property, and 5) allows WS to meet its obligations to government agencies or other entities.

Monitoring

The New Jersey WS program will annually provide to the U.S. Fish and Wildlife Service (FWS) and the New Jersey Division of Fish and Wildlife the WS lethal take of target and non-target animals to help ensure the total statewide take (WS and other take) does not impact the viability of target and non target wildlife species. In addition, the EA will be reviewed each year to ensure that it and the analysis are sufficient.

Public Involvement

The pre-decisional EA was prepared and released to the public for a 30-day comment period (March 13-April 12, 2002) by a legal notice in the *The Press of Atlantic City*, the *Courier-Post*, and the *Star Ledger*. The Legal Notice was placed in each paper for three days (March 13, 14, and 15, 2002). The pre-decisional EA was also mailed directly to a total of 75 agencies, organizations, and individuals with probable interest in the proposed program. A total of seventeen comment documents were received from the public after review of the pre-decisional EA. All comments were analyzed to identify substantive new issues, alternatives, or to redirect the program. All letters and responses are maintained in the administrative file located at the New Jersey Wildlife Services Office, 140-C Locust Grove Road, Pittstown, NJ 08867. Wildlife Services responses to specific comments and issues are included in Appendix A of this Decision and FONSI.

Major Issues

The EA describes the alternatives considered and evaluated using the identified issues. The following issues were identified as important to the scope of the analysis (40 CFR 1508.25).

- Effects on Target Canada Goose Populations
- Effectiveness of Wildlife damage Management
- Effects on Aesthetics
- Humaneness and Animal Welfare Concerns of Methods Used by WS
- Effects on Nontarget Wildlife Species Populations, Including T&E Species

Affected Environment

The proposed action will affect private and public lands in New Jersey including, but not necessarily limited to property on or adjacent to airports, golf courses, athletic fields, recreational areas, swimming beaches, parks, corporate complexes, subdivisions, businesses, industrial parks, schools, agricultural areas, natural areas, habitat restoration sites, roadways, and cemeteries.

Alternatives That Were Fully Evaluated

The following four alternatives were developed to respond to the issues. One additional alternative was considered but not analyzed in detail. A detailed discussion of the effects of the Alternatives on the issues is described in the EA; below is a summary of the Alternatives.

Alternative 1: Integrated Wildlife Damage Management (Proposed Action/No Action)

The proposed action is for the WS program to conduct an IWDM program that responds to requests for Canada goose damage management to protect property, agricultural crops, natural resources, quality of life, human health, and human safety in New Jersey. Requests for assistance may occur

anywhere and anytime in New Jersey. An IWDM approach would be implemented which would allow the use of legal techniques and methods, used singly or in combination, to meet requestor needs for reducing conflicts with waterfowl. Cooperators requesting assistance would be provided with information regarding the use of effective non-lethal and lethal techniques. Non-lethal methods used by WS may include resource management, physical exclusion, and deterrents. Lethal methods used by WS may include nest and egg treatment/destruction, live capture and transportation to a licensed poultry processing facility, live capture and euthanasia, and/or shooting. In many situations, the implementation of non-lethal methods such as habitat alteration, repellents, and exclusion type barriers would be the responsibility of the requestor to implement. Canada goose damage management by WS would be allowed in New Jersey, when requested, on private property or public facilities where a need has been documented and, upon completion of an *Agreement for Control*. All management actions would comply with appropriate federal, state, and local laws.

Alternative 2: Technical Assistance Only by WS

This alternative would not allow for WS operational Canada goose damage management in New Jersey. WS would only provide technical assistance and make recommendations when requested. Producers, property owners, agency personnel, or others could conduct Canada goose damage management using any legal lethal or nonlethal method. Currently, alpha-chloralose is only available for use by WS employees. Therefore, use of this chemical by private individuals would be illegal and unavailable for use. Appendix B of the Environmental Assessment (EA) describes a number of methods that could be employed by private individuals or other agencies after receiving technical assistance advice under this alternative.

Alternative 3: Non-lethal Only by WS

This alternative would require WS to use or recommend nonlethal methods only to resolve Canada goose damage problems. Persons receiving technical assistance could still employ lethal methods that were available to them. Currently, alpha-chloralose is only available for use by WS employees. Therefore, use of this chemical by private individuals would be illegal. Appendix B of the EA describes a number of nonlethal methods available for use by WS under this alternative.

Alternative 4: No Federal WS Canada Goose Damage Management

This alternative would eliminate Federal involvement in Canada goose damage management in New Jersey. WS would not provide direct operational or technical assistance and requesters of WS services would conduct WDM without WS input. Information on Canada goose damage management methods may be available to producers and property owners through other sources such as USDA Agricultural Extension Service offices, universities, or pest control organizations. Alpha-chloralose is only available for use by WS employees. Therefore, use of this chemical by private individuals would be illegal and unavailable for use.

Alternative Considered but not Analyzed in Detail:

Non-lethal Methods Implemented Before Lethal Methods

This alternative is similar to Alternative 1 except that WS personnel would be required to always recommend or use non-lethal methods prior to recommending or using lethal methods to reduce

Canada goose damage. Both technical assistance and direct damage management would be provided in the context of a modified IWDM approach. Alternative 1, the Proposed Action, recognizes non-lethal methods as an important dimension of IWDM, gives them first consideration in the formulation of each management strategy, and recommends or uses them when practical before recommending or using lethal methods. However, the important distinction between the Non-lethal Methods First Alternative and the Proposed Alternative is that the former alternative would require that all non-lethal methods be used before any lethal methods are recommended our used.

While the humaneness of the non-lethal management methods under this alternative would be comparable to the Proposed Program Alternative 1, the extra harassment caused by the required use of methods that may be ineffective could be considered less humane. As local Canada goose populations increase, the number of areas negatively affected by geese would increase, and greater numbers of geese would be expected to congregate at sites where non-lethal management efforts were not effective. This may ultimately result in a greater numbers of geese being killed to achieve the local WAC than if lethal management were immediately implemented at problem locations (Manuwal 1989). Once lethal measures were implemented, Canada goose damage would be expected to drop relative to the reduction in localized population of Canada geese causing damage.

Since in many situations this alternative would result in greater numbers of geese being killed to achieve the local WAC, at a greater cost to the requester, and result in a delay in reaching the local WAC in comparison to the Proposed Alternative, the Non-lethal Methods Implemented Before Lethal Methods Alternative is removed from further discussion in this document.

Finding of No Significant Impact

The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this proposed action. I agree with this conclusion and therefore find that an EIS need not be prepared. This determination is based on the following factors:

- 1. Canada goose damage management as conducted by WS in New Jersey, is not regional or national in scope.
- 2. The proposed action would pose minimal risk to public health and safety. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1997, Appendix P).
- 3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. Built-in mitigation measures that are part of WS's standard operating procedures and adherence to laws and regulations will further ensure that WS activities do not harm the environment.
- 4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to wildlife damage management, this action is not highly controversial in terms of size, nature, or effect.

- 5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.
- 6. The proposed action would not establish a precedent for any future action with significant effects.
- 7. No significant cumulative effects were identified through this assessment. The number of Canada geese killed by WS, when added to the total known other take of this species, would fall within population management objectives supported by the New Jersey Division of Fish and Wildlife and the U.S. Fish and Wildlife Service. The EA discussed cumulative effects of WS on target and non-target species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State.
- 8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.
- 9. An informal consultation confirmed that the proposed action would not likely adversely affect any Federally listed T&E species. The proposed project would not adversely affect New Jersey State listed threatened or endangered species.
- 10. The proposed action would be in compliance with all federal, state, and local laws.

Decision and Rationale

I have carefully reviewed the Environmental Assessment (EA) prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 1 (Integrated Wildlife Damage Management Program (Proposed Action/No Action) and applying the associated mitigation measures discussed in Chapter 3 of the EA. Alternative 1 is selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species populations; (2) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and, (3) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of these issues are considered. The comments identified from public involvement were minor and did not change the analysis. Therefore, it is my decision to implement the proposed action as described in the EA.

Copies of the EA are available upon request from the New Locust Grove Road, Pittstown, NJ 08867.	Jersey Wildlife Services Office, 140-C
Charles S. Brown, Acting Regional Director APHIS-WS Eastern Region	Date

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APPENDIX A

Response to Comments to the

Pre-Decisional Environmental Assessment Canada Goose Damage Management in New Jersey

1. The use of nonlethal methods alone has been implemented at great expense and is time-consuming, yet does not reduce goose damage to tolerable levels.

Program Response: The Proposed Action (Alternative 1) would allow WS to use, implement, and recommend lethal and nonlethal Canada goose damage management methods and approaches, as described in Sections 1.2.1, 3.3.1, and 4.1 of the EA.

2. Elimination of goose reproduction is not enough to achieve population reduction that is necessary to reduce goose damage to a tolerable level.

Program Response: The Proposed Action (Alternative 1) would allow WS to use, implement, and recommend lethal and nonlethal Canada goose damage management methods and approaches, as described in Sections 1.2.1, 3.3.1, and 4.1 of the EA. In many NJ locations, implementation of nonlethal methods and on-site elimination of goose nesting has not reduced goose damage to tolerable levels. Elimination of goose nesting does not reduce the number of adult geese associated with the site, although it may render adult geese somewhat more responsive to harassment since they are not attached to nests and goslings, as stated in Appendix B of the EA. To equal the effect of removing an adult bird from a population, all eggs produced by that goose during its entire lifetime must be removed (Smith et al. 1999). Furthermore, egg removal efforts must be nearly complete in order to prevent recruitment from a small number of surviving nests that would offset control efforts (Smith et al. 1999). Cooper and Keefe (1997), Rockwell et al. (1997), and Schmutz et al. (1997) reported that goose egg destruction is only fractionally effective in attaining population reduction objectives, and that nest/egg destruction is not an efficient or cost-effective damage management or population reduction approach.

The Atlantic Flyway Resident Canada Goose Management Plan (Atlantic Flyway Council 1999), states that to effectively reduce resident goose populations, an increase in adult and immature mortality rates, combined with reproductive control, is necessary. Reproductive control alone can not reduce the population in an acceptable time; treatment of 95% of all eggs each year would result in only a 25% reduction over 10 years (Allan et al. 1995). In contrast, reducing annual survival of resident geese by just 10% would reduce a predicted growth rate of +15%/year to a stable population, assuming moderate recruitment (Atlantic Flyway Council 1999).

3. Management of goose-problems and damage should be the responsibility of the Federal government. Goose damage management activities should be coordinated and conducted by the Federal government's USDA APHIS WS program.

Program Response: WS recognizes the legal authority and responsibilities that the U.S. Fish and

Wildlife Service and the NJ Division of Fish and Wildlife enjoin in the management of Canada geese. While the Federal government has ultimate authority and responsibility, the States are also involved in migratory bird management and have considerable input and involvement in regulatory issues. WS was established by Congress as the agency responsible for providing wildlife damage management to the people of the United States, as stated in Section 1.1 of the EA. In NJ, WS-conducted Canada goose damage management activities are conducted by WS wildlife biologists and biological science technicians, who comply with Federal, state, and local laws, to conduct management programs that are supported and funded through contracts/agreements, and permits or other authorities.

4. Direct management action to reduce the population should be taken now.

Program Response: WSs objective is not to manage overall goose populations in New Jersey, but rather to address requests for assistance to reduce damage at specific sites. WS is authorized by law to protect American agriculture and other resources from damage associated with wildlife. This includes damage management associated with Canada geese. WS recognizes the legal authority and responsibilities that the U.S. Fish and Wildlife Service and the NJ Division of Fish and Wildlife enjoin in the management of Canada geese. The Proposed Action (Alternative 1) would allow WS to use, implement, and recommend Canada goose damage management methods and approaches to reduce goose damage within population goals and objectives set by the NJ Division of Fish and Wildlife and the U.S. Fish and Wildlife Service, as described in Sections 1.2.1, 3.3.1, and 4.1 of the EA. Direct management actions taken by WS to reduce the goose population would not exceed prescribed limits set by these two regulatory wildlife management agencies.

5. Implementation of non-lethal methods should not be required prior to implementation of lethal methods.

Program Response: The Proposed Action (Alternative 1) would allow WS to use, implement, and recommend lethal and nonlethal Canada goose damage management methods and approaches, as described in Sections 1.2.1, 3.3.1, and 4.1 of the EA. "Nonlethal Methods Implemented Before Lethal Methods" was evaluated and eliminated from further discussion in Section 3.4 of the EA. The Proposed Action, Integrated Wildlife Damage Management, does not require that nonlethal methods are implemented prior to use of lethal methods, since some situations require at least concurrent use of various lethal and nonlethal methods to accomplish damage reduction to a tolerable level. WS will consider non-lethal methods as part of an overall IWDM program. However, non-lethal methods may not always be applied as a first response to each damage problem. The most appropriate response may often be a combination of non-lethal and lethal methods, or there may be instances where application of lethal methods alone would be the most appropriate strategy.

6. USDA APHIS WS program should include management of a goose control activities database, coordination with local governments to optimize use of control tools, and implementation of control actions by trained individuals.

Program Response: In NJ, WS-conducted Canada goose damage management activities are conducted by WS wildlife biologists and biological science technicians, who comply with Federal, state, and local laws, to conduct management programs that are supported and funded through contracts/agreements, and permits or other authorities. WS routinely maintains wildlife damage management data, coordinates activities with federal, State and local agencies, and conducts

management actions through employment of trained wildlife biologists and biological science technicians. WS maintains a Management Information System database to document assistance that WS provides in addressing wildlife damage conflicts. A summary of this data is presented in Section 1.3.3 and 1.4 of the EA. A comprehensive statewide (NJ) goose control activities database does not currently exist, but could be maintained by WS pursuant to a funded contract designed for that effort.

7. Funding should be made available to WS to implement the Preferred Alternative.

Program Response: In NJ, the USDA APHIS WS program is supported by Appropriated and Cooperator-provided funds. The Appropriated funding, provided by the United States Congress through the USDA, partially supports provision of technical assistance by WS to requestors of Canada goose damage management assistance in NJ. Cooperator-provided funds are provided pursuant to contracts and agreements, and support provision of technical and direct management assistance to program cooperators. WS actions under the Preferred Alternative would be supported by funding provided through the Federal Appropriation and Cooperators.

8. Nonlethal methods and elimination of goose nesting are preferred over lethal methods to resolve conflicts with Canada geese.

Program Response: The Proposed Action (Alternative 1) would allow WS to use, implement, and recommend an integrated program that would include lethal and nonlethal Canada goose damage management methods and approaches, as described in Sections 1.2.1, 3.3.1, and 4.1 of the EA. In many NJ locations, implementation of nonlethal methods and on-site elimination of goose nesting has not reduced goose damage to tolerable levels. In some situations, combined use of nonlethal methods and egg destruction is not sufficient to reduce goose-related damage to tolerable levels. In those and similar cases, implementation of lethal methods is accepted by the requestor as the preferred approach in order to protect human health and safety and resources. Elimination of goose nesting does not reduce the number of adult geese associated with the site, although it may render adult geese somewhat more responsive to harassment since they are not attached to nests and goslings, as stated in Appendix B of the EA. To equal the effect of removing an adult bird from a population, all eggs produced by that goose during its entire lifetime must be removed (Smith et al. 1999). Furthermore, egg removal efforts must be nearly complete in order to prevent recruitment from a small number of surviving nests that would offset control efforts (Smith et al. 1999). Cooper and Keefe (1997), Rockwell et al. (1997), and Schmutz et al. (1997) reported that goose egg destruction is only fractionally effective in attaining population reduction objectives, and that nest/egg destruction is not an efficient or cost-effective damage management or population reduction approach.

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